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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,975	01/23/2001	Stephen P. Williams	Q01-1000-US1	2314

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EXAMINER

BLOUIN, MARK S

ART UNIT	PAPER NUMBER
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2653

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/768,975	Applicant(s) WILLIAMS ET AL.	
	Examiner Mark Blouin	Art Unit 2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,9-11,13 and 22-75 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6,9-11,13 and 22-75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2653

Detailed Action

Response to Amendment

- The reply filed on April 8, 2005 was applied to the following effect: Rejection of Claims 6,9-11,13, and 22-75 are traversed.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 6,9-11,13, and 22-74 are rejected under 35 U.S.C. 102(e) as being anticipated by Kahn et al (USPN 6,134,087).
3. Regarding Claims 6,9-11,13,22,37,40,50, and 59 Kahn et al shows (Figs. 1-5) a head stack assembly for a disc drive including a storage disc, the head stack assembly comprising an actuator arm, a coarse positioner that moves the actuator arm relative to the storage disk, a transducer assembly including a load beam (10), a flexure (12) secured to the load beam, a data transducer (40) secured to the flexure (12), a separately formed base plate (18) securing the transducer assembly to the actuator arm, and a fine positioner (piezoelectric elements) secured directly to the base plate, the fine positioner moving a portion of the base plate

Art Unit: 2653

relative to the actuator arm, wherein the base plate further comprises a positioner cavity (23) that receives the fine positioner, the proximal and distal ends are secured under compression, a flex section (224,226) positioned adjacent to the positioner cavity, the flex section allowing the base plate to flex, a pair of spaced apart positioner cavities (Fig. 1) that receive the fine positioner, a pair of flex sections that allow the base plate to flex, wherein the positioner cavities are positioned between the flex sections, wherein the flex sections are positioned between the positioner cavities, wherein the fine positioner moves the transducer assembly substantially transversely relative to the actuator arm, further comprising a control system (Col 3, lines 22-35) that directs current to the coarse positioner to move the actuator arm so that the data transducer is positioned near or on the target track and directs current to the fine positioner to selectively move the base plate so that the data transducer is positioned and maintained on the target track during rotation of the storage disk, wherein the fine positioner is a piezoelectric motor (32,34).

4. Regarding Claims 23-27,43,44,45, 53, 54, 57, and 60-64, Kahn et al shows (Figs. 1-5) the base plate includes a pair of flex sections (26) that allow the base plate to flex, and wherein at least one or each of the piezoelectric motors is positioned substantially between the flex sections, and at least one of or each of the flex sections are positioned between the pair of piezoelectric motors, wherein at least one of the piezoelectric motor(s) do not contact either of the flex sections.

5. Regarding Claims 30,31,41, and 42, Kahn et al shows (Figs. 1-5) the base plate includes a plate mount (14) that secures the base plate to the actuator arm, wherein one of the piezoelectric motors, positioned parallel to each other is secured to the base plate substantially between the plate mount and the data transducer.

Art Unit: 2653

6. Regarding Claims 32,39,51,52,65,66, and 73, Kahn et al shows (Figs. 1-5) at least one of the piezoelectric motors includes a proximal end and a distal end, and wherein only the proximal end and a distal end are the only portions of at least one of the piezoelectric motor that contact the base plate secured to the base plate under compression.

7. Regarding Claims 33,34,35,36,46-49,55,56,58, and 71, Kahn et al shows (Figs. 1-5) the flex section (26) that cantilevers away from the plate side and is substantially "U" or "V" shaped.

8. Regarding Claims 67-70,72, and 74, are drawn to a method of retrieving data from a target track on a rotating storage disk of a disk drive using the aforementioned apparatus. The limitations of the method claims are met and are anticipated by Kahn et al when the apparatus operates.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 75 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kahn et al (USPN 6,134,087) in view of Ohwe et al (USPN 6,594,116).

Art Unit: 2653

11. Regarding Claim 75, Kahn et al shows all the features described, supra, but does not show a load beam where the base plate, which is at least approximately three times the thickness of the load beam.

Ohwe shows (Col 3, lines 62-63) that a load beam can be of a thickness ranging between 0.02 to 0.08 mm, which when combined with Kahn et al, would make the base plate at least approximately three times the thickness of the load beam.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the base plate of Shimizu et al with the load beam as taught by Ohwe et al. The rationale is as follows: One of ordinary skill in the art at the time the invention was made would have been motivated to combine the base plate of Kahn et al with the load beam as taught by Ohwe et al in order to improve positioning accuracy by the increased damping effect of the thicker base plate.

Response to Arguments

12. Applicant's arguments filed April 8, 2005 have been fully considered but they are not persuasive.

Applicant asserts on Page 13 :

*"Kahn et al does not teach or suggest a **separately formed** base plate that secures the load beam to the actuator arm, with the base plate including one or more flex sections."*

The Examiner maintains that Kahn et al discloses a load beam (10) with separate and distinct portions, the base (18), which includes flex sections (24) and (26), and the beam (22). The base portion secures the beam to the actuator arm via the mount plate (14). Therefore the rejection of Claims 6,9-11,13, and 22-75 is upheld.

Art Unit: 2653

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Blouin whose telephone number is (703) 305-5629. The examiner can normally be reached M-F, 6:00 am – 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful the examiner's supervisor, William Korzuch can be reached at (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314 for regular and After Final communications.

Any inquiry of general nature or relating to the status of application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Mark Blouin
Patent Examiner
Art Unit 2653
June 3, 2005



A. J. HEINZ
PRIMARY EXAMINER
GROUP ~~2653~~ A.U. 2653
